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SURVEY AND ASSESSMENT OF THE CULTURAL RESOURCES, MARION LAKE PR--ETC(U)

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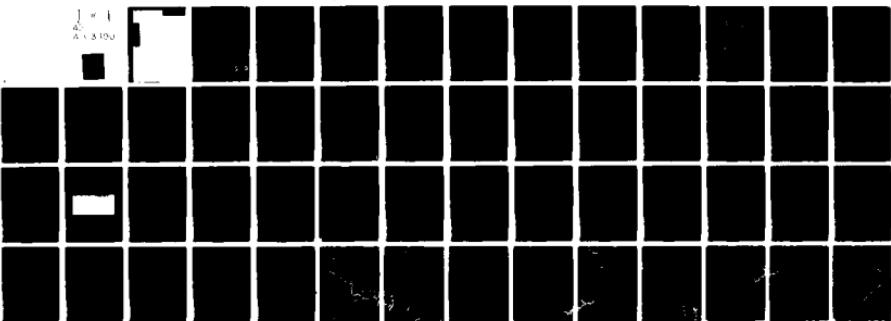
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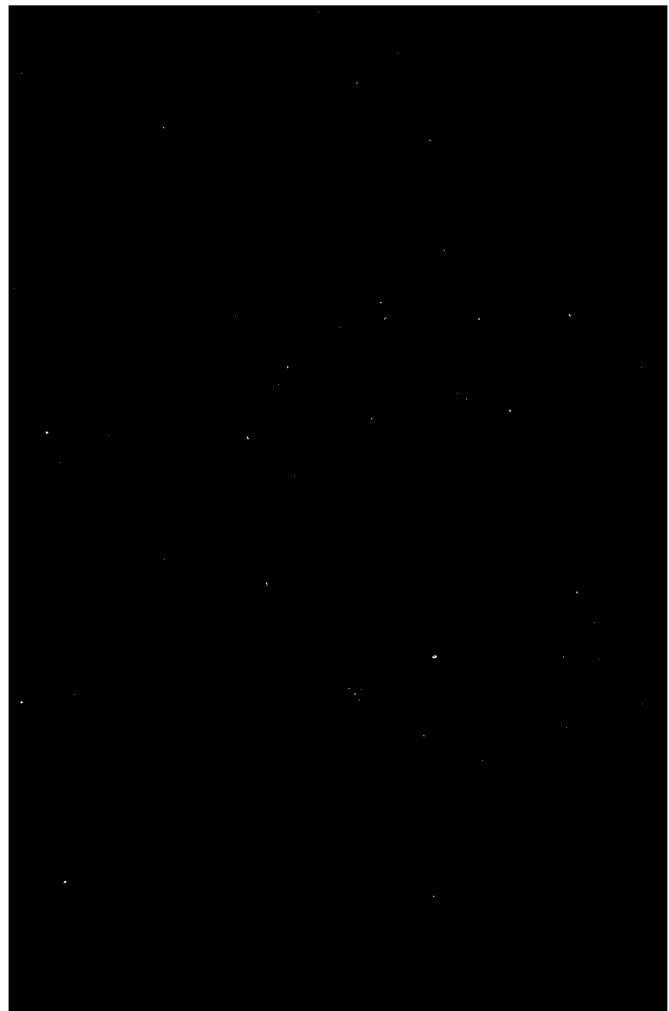
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SURVEY AND ASSESSMENT OF THE CULTURAL RESOURCES

MARION LAKE PROJECT

by

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and

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FINAL REPORT
Contract No. DACW56-79-C-0258
U. S. Army Corps of Engineers,
Tulsa District

WICHITA STATE UNIVERSITY
Archaeology Laboratories
1981

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ABSTRACT

A cultural resources survey has been conducted at the Marion Reservoir in response to a need for compliance with Executive Order 11593. This project involved informant interviews, archival searches and pedestrian survey of all federally owned and managed lands surrounding the reservoir. Three new archaeological sites were recorded by fieldwork in addition to three sites previously recorded by the Kansas State Historical Society. None warrants nomination to the National Register of Historic Places. Great Bend sites are known from north and south of Marion and work in these areas led to the establishment of the Marion Archaeological District. This survey has not provided evidence that the large Marion cluster of archaeological sites does not extend northwestward up the Cottonwood River.

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SURVEY AND ASSESSMENT OF THE CULTURAL RESOURCES

MARION LAKE PROJECT

I. INTRODUCTION

In order to comply with Executive Order 11593, the U. S. Army Corps of Engineers, Tulsa District, needed a complete inventory of all cultural resources within the boundaries of land under its jurisdiction at Marion Reservoir in Marion County, Kansas. Wichita State University was asked to conduct this inventory in order to provide information for development of a cultural resources management plan for this property. Contract No. DACW56-79-C-0258 was negotiated to investigate the 5,700 acres of water and land area. Only the exposed land surfaces were actually surveyed. Cultural resources are defined as any evidence, structure, or remains of historic or prehistoric nature.

Scope of Work

The agreement with the U. S. Corps of Engineers, Tulsa District, specified the following services to be performed:

- 1) The gathering and study of all available information relating to previous cultural resources and studies in the project area.
- 2) "On-foot coverage of the entire land surface within the project area to determine specific site locations" and recording of such resources on state archaeological survey forms and appropriate maps.
- 3) Relocation of all previously located sites within the project area "for the purposes of updating their condition."
- 4) Conducting limited tests "to determine the areal extent and depth of cultural deposits." "All sites must be photographed and mapped. Artifacts collected shall be cleaned, catalogued and analyzed."
- 5) Submission of a written report.
- 6) Completion and submission of "National Register nomination forms for individual sites which appear to meet eligibility criteria."

Setting

The Marion (Kansas) Reservoir is situated in the Cottonwood Valley of east central Kansas where the Cottonwood River flows from northwest to southeast (Fig. 1). The reservoir's main functions are flood prevention and recreation. The area covered with water is about seven miles by two miles with the longer portion extending from north to south.

Marion County lies within the Osage Plains on the Flint Hills Upland eastern escarpment. These escarpments are comprised of limestone outcrops ranging from north to south. These deposits provided rich chert sources for aboriginal tool materials.

The Osage Cuestas originally supported a tall grass prairie with big bluestem as the dominant ground cover. Numerous hardwood varieties--oak, black walnut, elm, linden, sycamore, Osage orange, locust, hickory, and pecan--were located along the streams of this well-watered area. Smaller woody shrubs and annuals were found within the region--persimmon, papaw, elderberry, serviceberry, chokecherry, sunflowers, and wild grapes.

The prairie teemed with bison, elk, coyote, antelope, rabbit, and badger. The forested regions provided shelter and subsistence for white-tail and mule deer, black bear, cougar, lynx, red and grey fox, raccoon, opossum, squirrel, beaver, muskrat, and otter.

Bird species were represented by wild turkey, prairie chicken, grouse, and quail. Fish, shellfish, and turtles were abundant in the streams (Monger 1970; Schoewe 1949; Van Meter 1972; and Wedel 1959).

Weather conditions in Kansas are quite varied for the temperature can range from -40° to 121° Fahrenheit. The mean temperature approximates 55° Fahrenheit. The characteristic weather pattern is one of cold dry winters and hot summers. Strong winds are constant within this area and average from eight to sixteen miles per hour. Precipitation varies within the state from approximately 16 inches in the western portion to nearly 40 inches in the southeast. The major amount of moisture falls during summer thunderstorms with winter snowfall amounts from 10 to 20 inches (Monger 1970). Marion Reservoir experiences about 30 inches of moisture annually.

Topographically, the reservoir area is one of gently rolling hills with minor variations in vertical height. Elevations range from 1354 to 1375 feet above mean sea level.

The Cottonwood Valley's broad flat floodplain has a long history of habitation by Native Americans and Euro-americans. Several valley

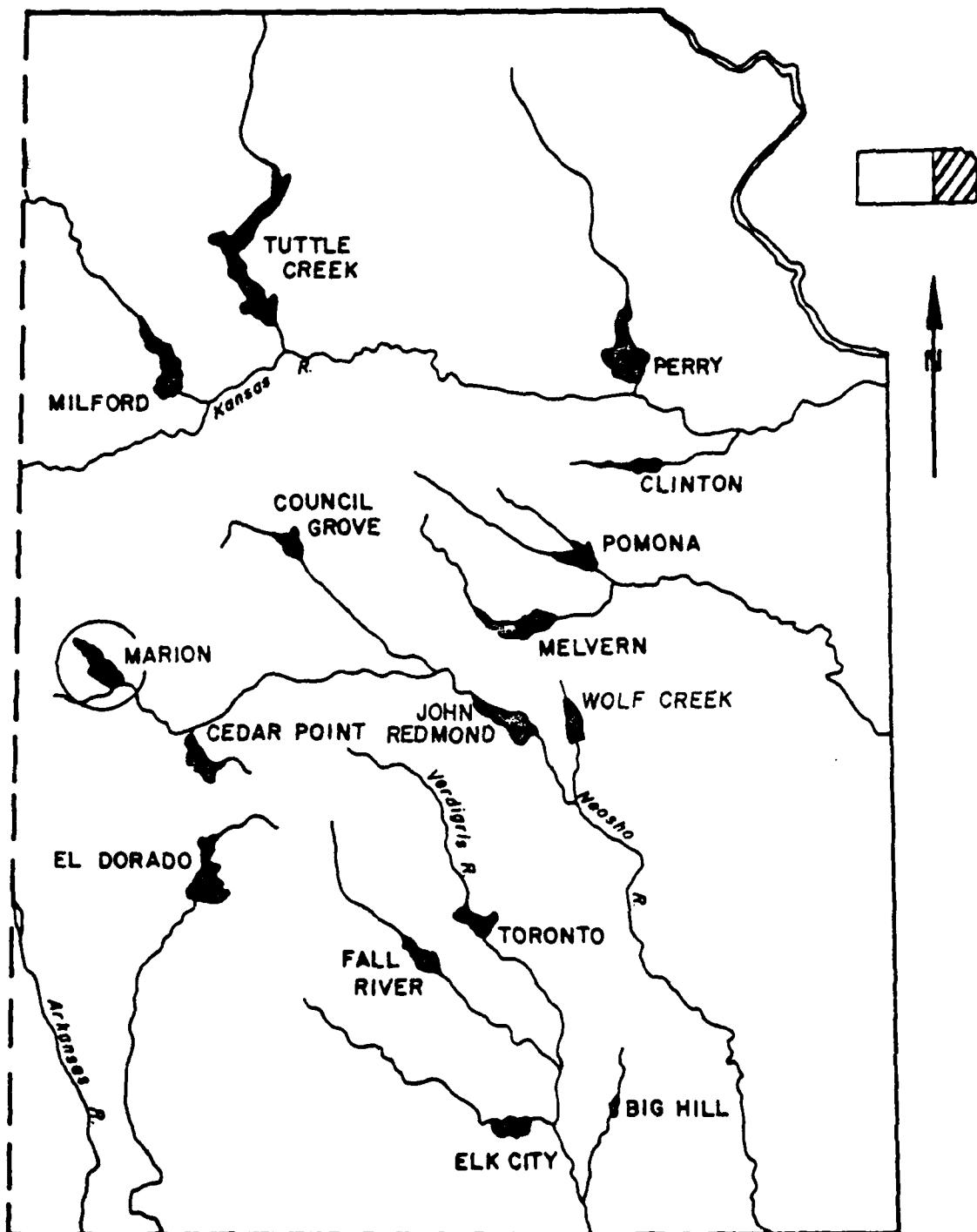


FIGURE 1. MAP OF EASTERN KANSAS

areas have become marshy and boggy, thus hindering farming activities of the later occupants. This marsh condition was one factor in choosing this locality for the reservoir construction.

Members of the U. S. Geological Survey are in Marion at the present time preparing a county soil map. The only areas with significant soil disturbance are at the south near the dam and at the northern edge. The general area is well-drained with heavier than normal soil on the east shore because of a higher shale content. The soil is limey, calcareous and deeply tillable. The western side is composed of mixed materials with a high sand content. The river valley has always had a significantly higher sand content in the soil and since completion of the reservoir, the shorelines have become increasingly sandy. Water action separates sand from the silt. At some shore locations sand deposition has increased to circa 50 centimeters in depth. These deposits are evident on the Durham Cove shoreline that is subject to localized prevailing winds from the east and southeast (A. R. Gantz, Marion County Soil Agent), in contrast to the regional pattern of southwesterly prevailing winds.

Research Design

The Marion locality served as a major settlement for peoples of the Great Bend culture from the 16th through the 18th centuries. In conducting archaeological investigations for the Marion Local Protection Project, Wichita State University has attempted to delineate this extensive Great Bend settlement, much of which is presently included in the Marion Archaeological District, a property listed on the National Register of Historic Places. Full delineation of this settlement requires not only identification of Great Bend sites, but the survey of surrounding areas without Great Bend sites. A recent survey around the Marion County Lake to the southeast of Marion helped delineate the southeastern edge of the settlement while the proposed Marion Reservoir survey should assist in delineating the northwestern boundary. Previous work in the reservoir locality suggests a scarcity of sites. This survey can be expected to verify the earlier results.

Previous Archaeological Work at Marion, Kansas

Wedel (1959) summarizes the earliest archaeological excavations in the vicinity of Marion during the late 1970's. The work was sponsored by the Peabody Museum of Harvard University and its director, F. W. Putnam. Edwin Curtiss, a Marion resident, dug several earthen mounds and rock cairns south of the town in 1879. The Peabody Museum houses the collection which Curtiss excavated. The information was

later incorporated into a report by Putnam. Wedel suggests the earthen mounds were most likely middens or refuse deposits rather than burial mounds. Refuse mounds would indicate possible village site locations which he believes correspond with the Great Bend Aspect. The rock cairns suggest a type of feature associated with the Plains Woodland period and could be a western extension of the Hopewell Complex (Wedel 1959:502-3).

Other archaeological collections from the Marion area have been deposited in the National Museum at the Smithsonian Institution in Washington, D. C. J. W. Lambuth donated his collection in 1892. M. O. Billings, also a Marion resident and collector, gave his materials to the Institution. These collections provided specimens that closely resembled others of the protohistoric Great Bend Aspect.

Until the 1960's archaeological work in the Marion vicinity stemmed mainly from the efforts of local residents. Since that time, the Kansas State Historical Society, the University of Kansas, and Wichita State University have surveyed archaeological site locations in the area. In 1963, the Kansas State Historical Society surveyed the area to be flooded by Marion Reservoir, recording three sites. The University of Kansas recorded six sites south of town during a 1965 survey. In 1973, the Historical Society also conducted survey and testing for a potential rerouting of U. S. Highway 56. Wichita State University has conducted site survey and contract excavations for the Tulsa District of the U. S. Army Corps of Engineers and the National Park Service in connection with the Marion Local Protection Project for flood control from 1973 through 1976. This work provided the basis for nominating the Marion Archaeological District for inclusion on the National Register of Historic Places in 1976. In 1979 the same institution conducted a survey of the Marion County Lake southeast of town, locating only three new sites.

The Marion Archaeological District contains a concentration of 26 known archaeological sites clustering around the north, south, and west margins of present-day Marion within the floodplain and contiguous low terraces of the Cottonwood River and its tributaries, Clear and Mud Creeks. Seventeen of the sites are presumed to represent an unusually large settlement of Great Bend Aspect populations. Other occupational affiliations believed to be present are the Archaic, Plains Woodland Tradition, and 19th century Historic. All these sites are located within a one-mile radius of Marion. The Marion Archaeological District has been designated as a National Register property.

The Kansas State Historical Society has recorded several sites in the Marion Reservoir locale. Three are directly associated with the reservoir. Site 14MN302 was located in Section 16 on a low sandy knoll on the east side of the Cottonwood River valley. It was approximately one-half mile from the river channel. Four test

pits were dug, producing a chunk of red ochre and a small number of chert flakes. Specimens (from the surface?) include the base of a medium-sized stemmed point, the medial section of a bifacially chipped blade, portion of a sandstone mano, and miscellaneous worked flakes. The stone was locally available grey, tan, and pink chert. A late Archaic occupation was suggested. The site is now beneath the main pool of the reservoir.

Site 14MN303 lies in Section 17 just west of the junction of French Creek and the Cottonwood River. Artifacts recovered from the sandy terrace here included a core, the medial section of a large point, and chert flakes.

The north bank of the Cottonwood River has produced a large surface collection that is in the possession of a Hillsboro resident. Located in Section 26, Site 14MN310 lies on top of a low ridge paralleling the river. The collection includes three point styles. The plain triangular projectile points have either straight or convex bases and the blade edges taper toward the tips. The large stemmed points suggest either an Archaic or Plains Woodland occupation. Side-notched points represent a second component that may be associated with the Central Plains Phase. After viewing the surface collection, Kansas State Historical Society staff recommended extensive testing for Site 14MN310 (Witty 1963).

Additional sites recorded by the Kansas State Historical Society form a cluster northwest of Durham, outside the reservoir boundaries. These include Sites 14MN339, 369, 370, 371, 372, 374, 375, and 376.

II. CULTURAL HISTORY OF THE MARION AREA

Wedel (1959 and 1961) summarized Kansas' culture history in terms of five broad stages--Paleo-Indian, Archaic, Plains Woodland, Plains Village/Farmer, and Historic. The last four appear to be represented in Marion County covering a time span from 5000 B.C. to the present.

Prehistory

Kansas has produced very little widely scattered evidence regarding occupation earlier than ca. 5000 B.C. Since all surrounding states have produced materials that fall within the Paleo-Indian stage, there are probably comparable sites within the confines of the state that have not yet been detected.

Paleo-Indian (11,000 - 6,000 B.C.)

Lithic materials associated with the earlier Llano Complex Paleo-Indian big game hunters using Clovis Fluted Points, have been recovered from Missouri, Colorado, New Mexico, and Texas; Lindenmeier Complex remains with Folsom Fluted Points are known from Colorado, New Mexico, and Texas; and the later Plano Complex has been identified from Iowa, Nebraska, Colorado, New Mexico, Texas, and Oklahoma. Sporadic finds of extinct faunal remains and projectile points recognizable as Paleo-Indian are known from some areas of the state (e.g. Solecki 1953; Wedel 1959:88-89; Reichart 1972, 1974; Glover 1978). Remains of Paleo-Indian occupation are generally represented by kill and butchering sites of extinct mammoth and bison mega-fauna. People of this stage presumably lived in small bands following the big game animal herds. Their subsistence was based on hunting with supplemental gathering and their camps were for temporary occupation. The Paleo-Indian tool assemblage included Clovis, Folsom, Plainview, Eden, and Scottsbluff projectile points.

Archaic (5000 B.C. - A.D. 300)

New subsistence techniques developed during the Archaic Stage in response to climatic changes and the extinction of some mega faunal species. Hunting, gathering, and foraging for smaller animal forms and wild plant foods constituted a more generalized subsistence

base. Settlements were generally composed of small bands of people living near streams. Some natural caves and rock shelters were selected as campsites. Occasional house remains have been identified in a few late Archaic sites. Apparently Archaic bands regularly moved among two or more camps to exploit resources as they became seasonally plentiful. Many artifacts (grinding stones, manos, and cupstones) from Archaic sites present evidence of plant processing, while other stone items--such as axes, gouges, knives, and drills--reflect increased bone working and hide processing. Projectile points were stemmed and side-notched types and generally less finely crafted than Paleo-Indian examples.

Within Kansas, Archaic materials have been identified from the William Young Site (14MO304) in the Council Grove Reservoir. The Munkers Creek Phase, presently recognized from areas of the eastern Flint Hills, is characterized by large lanceolate points, a distinctive knife form, chipped stone axes, gouges, and fired clay effigy heads. Charcoal from the site has been radiocarbon dated at 3390 B.C. \pm 160 (Witty 1964, 1969).

Around Kansas City, a Nebo Hill Complex has been defined primarily on a distinctive lanceolate dart point with a diamond-shaped cross section, 3/4 grooved stone axes, and loaf-shaped manos (Shippee 1948, 1964). Fiber-tempered pottery has been reported along with these artifacts and, to date, marks one of the earliest occurrences of pottery in North America (Reid 1979).

Four levels of Archaic deposits have been recognized at the Coffey Site on Tuttle Creek in northern Pottawatomie County. Excavations revealed assemblages consistent with other Archaic complexes from eastern Kansas and western Missouri. Numerous animal and plant remains indicated exploitation of a broad resource base during summer and fall. Bison predominated in lower levels but were increasingly replaced by deer in the upper levels. Various projectile point styles represented lanceolate, basal-notched, and corner-notched forms. The tool assemblage also included stone axes, gouges, drills, Munkers Creek knives, manos in the upper levels, bone awls, punches, and flakers. Sixteen radiocarbon dates from the Coffey Site range between 3405 B.C. \pm 70 and 3130 B.C. \pm 60 (Schmits 1976).

A probable late Archaic occupation in southeastern Kansas has been summarized by Calabrese (1967:13-18) from a series of very poorly defined components ranging through the Verdigris River drainage system in Lyon, Coffey, Greenwood, Chautauqua, and Montgomery Counties. Identification of these components depended on their distinctive yet similar stratigraphic circumstances. Five quite consistent radiocarbon dates from hearths in four of these sites ranged from 1830 B.C. \pm 140 to 1300 B.C. \pm 140. The Williamson Site (14CF330) in the John Redmond Reservoir, Coffey County, contained two human

burials and an associated dog burial. Hearth residues from this same site produced radiocarbon dates of 1650 B.C. \pm 190 and 1550 B.C. \pm 100 (Witty 1980). Projectile points of the Lange (Bell 1958:36), Afton (Bell 1958:6), and Ellis (Bell 1960:32) styles may relate to some of these components.

A fuller, but undated, late Archaic occupation has been described from Coffey County to the north of Toronto (Rohn, Stein, and Glover 1977). This Colvin Phase seemed to mark hunting and butchering camps with point styles resembling Table Rock (Perino 1968:96), Ellis (Bell 1960:32), Langtry (Bell 1958:38), Palmilla (Bell 1960:74), and Rice Lobed (Perino 1968:76). Gathering activities were indicated by grinding stones and fresh water mussel shells.

Further west in the El Dorado reservoir region in Butler County, investigations by the University of Kansas have established a series of three separate Archaic horizons: the Chelsea, El Dorado, and Walnut Phases. Although the Chelsea Phase needs a more exacting definition, it appears to be contemporaneous with both Nebo Hill and Munkers Creek manifestations of the Archaic in northeastern Kansas (Leaf 1979).

The El Dorado Phase (2000 B.C. - 1400 B.C.), although similar in content to the Chelsea Phase, exhibits a wider variation in the overall artifact assemblage. Long, narrow, stemmed points with straight to convex bases are the single most diagnostic feature of this phase, while drills, grinding stones, scrapers, and axes flesh out the remainder of the lithic inventory (Grosser 1973).

Finally the Walnut Phase (1200 B.C. - A.D. 1) exhibits a somewhat new inventory in point styles. Typically, points such as Gary, Langtry, and a Scallorn-like variant with corner notching are considered the diagnostic features of this phase. At the Snyder Site (14BU9), remains of deer and bison and the presence of several hearths helped illustrate the nomadic hunting pattern of this phase (Grosser 1973; Leaf 1979).

Plains Woodland (A.D. 300 - 1200)

During the Plains Woodland, settlements were still concentrated along stream terraces and small rivers. There was still considerable dependence on hunting post-Pleistocene fauna and the gathering of wild plant resources, although the beginnings of limited crop cultivation are indicated. This allowed the Woodland peoples to adopt a more sedentary settlement in loosely defined villages. New cultural patterns included ceramics. Pottery vessels contained grit or sand temper with either plain or cord-roughened surfaces. Projectile points were corner-notched and stemmed with distinctively smaller ones marking the introduction of the bow and arrow.

Well defined styles of artifact manufacture and burial behavior have led the Woodland Stage of eastern North America to be divided into three substages--Early, Middle, and Late. Early Woodland sites have yet to be distinguished in Kansas, although Middle and Late Woodland are well represented. The Hopewell Phase of the Illinois and Ohio River valleys represents the climax of the Middle Woodland lifestyle. Near Kansas City, the Renner Phase may have been a western colony of this distinctive cultural pattern. Middle Woodland style has been recovered from sites at the Redmond Reservoir (Witty 1980).

The Cuesta Phase was first identified by Marshall (1972) in the lower Verdigris River drainage of southeastern Kansas on the basis of clay-tempered cord-roughened pottery with stamped decoration and villages containing several very large dwellings. House plans were oval with widely spaced postholes. Ceramic vessels exhibited several surface texturing techniques--cord-marking, rocker stamping, and impressing. Bifacially chipped stone blades, knives, and stemmed projectile points, polished stone celts and axes argue for well-developed wood, bone, and hide working industries. Long term site occupation may be inferred by the abundant midden deposits (Rowlison 1977). The Infinity Site from the Elk City Reservoir has yielded radiocarbon dates of A.D. 780 ± 80 and A.D. 970 ± 80 (Marshall 1972).

During the El Dorado Reservoir project in Butler County, the University of Kansas has defined a Butler Phase with radiocarbon dates of A.D. 980 ± 80 and A.D. 1060 ± 60 . Cord-marked pottery with indurated clay temper was found at Site 14BU55. Site 14BU9 produced ceramics with calcite temper and zoned, dentate stamping. The cord-marked pottery from Site 14BU19 contained temper of indurated clay, limestone, sand, or combinations of the three, while rim sherds exhibited either rounded or flattened lips. Stone tools indicated usual Woodland activities, such as hunting, gathering, limited horticulture, butchering, hide working, and plant processing (Leaf 1979).

Wood (1977) recognized Early Ceramic Plains Woodland sites in the Cedar Point Reservoir. No definite house structures were found, although they may well be present. Nuclear family settlement patterns are indicated from areas of cultural debris along stream terraces of Cedar Creek. The large number of sites recorded suggests long term occupation. Pottery specimens are usually tempered with limestone, although sherd and shale tempers are also present. They exhibit cord-roughened exterior surfaces, straight side walls with the orifices slightly constricted, slight shoulders, and conoidal bases. Stone artifacts included large corner-notched and small side-notched points, utilized flakes, scrapers, drills, and bifaces (Wood 1977).

Central Plains (A.D. 800 - 1400)

Although the Smoky Hill Aspect of the Central Plains Tradition may be found in the drainage of the Smoky Hill River a short distance north of Marion (Wedel 1959), evidence for contemporary remains around Marion is so far lacking. Only about 25 miles to the southeast, probable Pomona Focus sites have been identified at Cedar Point (Wood 1977:98-99). At El Dorado, Site 14BU71 has been interpreted as a habitation of the Plains Village cultural pattern (Leaf 1979). The surprising lack of comparably aged materials from Marion may be the result of the dense Great Bend settlement having obscured the evidence.

Proto-Historic Stage (A.D. 1400 - 1700)

Many sedentary cultural complexes from North Dakota to Oklahoma continue into the Proto-Historic Stage. A distinctive group occupying a triangle on the northeast side of the Arkansas River formed by Great Bend, Marion, and Arkansas City has been labelled Great Bend Aspect (Wedel 1959). During this stage, there was an influx of migrating peoples--such as Kansa, Osage, Comanche--into the future state of Kansas.

The proto-historic people possessing this culture are believed to be predecessors of the historic Wichita Indians. Coronado and Onate met these Quiviran people in 1541 and 1601, respectively, during their travels through the present state of Kansas. The Great Bend people are thought to have moved south into Oklahoma during the late 1700's responding to a westward Siouan movement into the Plains.

The majority of archaeological remains along the Cottonwood River near Marion represent Great Bend village sites of considerable size. No Great Bend sites appear to be located outside the area bounded by the Smoky Hill River (north), Butler, Chase, and Cowley Counties (east), Arkansas City on the Arkansas River (south), and Larned in Pawnee County (west).

Two foci (phases) presently subdivide the Great Bend Aspect into northern and southern variants. The Little River Focus encompasses such village sites as Tobias, Thompson, Malone, and Paint Creek in Rice and McPherson Counties. The Lower Walnut Focus in Cowley County cluster around Arkansas City. Great Bend sites in Marion County seem to contain a mixture of these two foci (Wedel 1959). Possible Great Bend materials may be present in the El Dorado Reservoir (Leaf 1979).

Great Bend people apparently inhabited sedentary villages raising crops of corn, beans, and squash in the floodplains and periodically embarking on bison hunts over the surrounding plains.

While on these periodic hunts, semi-permanent camps were constructed as Monger (1970) postulated for the Larned Site. Coronado and Onate described a typical Quiviran house as constructed of poles and thatch with a circular shape ten to eighteen feet in diameter.

The Great Bend Aspect had a relatively rich and varied artifact assemblage. Fragmentary pottery recovered from major sites suggests an emphasis on utilitarian wares. The usual jar shape is taller than wide, devoid of decoration, with a constricted neck, slightly flared rim and paired vertical loup handles riveted to the vessel walls.

Other cultural material remains exhibit an abundant variety of bone and stone tools. Bison scapular hoes and milling stones are common as are end and side scrapers and beveled knives. Projectile points are small triangular shapes, usually unnotched. Drills, perforators, awls, grooved mauls, and choppers are present at most sites. Bone tools include fleshers, awls, shaft straighteners, flakers, and bison ribs with a series of transverse grooves.

Most lithic artifacts were manufactured from local chert, chalcedony, and agate sources. Evidence of trade is indicated by the presence of Peoria chert from northeastern Oklahoma, sherds of Puebloan pottery, pipes and ornaments of Minnesota or glacial drift pipestone, and obsidian from New Mexico. Fragments of chain mail recovered from the Tobias and Paint Creek Sites verifies the documentary references of Spanish contact (Wedel 1959, 1961).

History

1. Historically Known Indian Occupants

Beside the Spanish, several Frenchmen explored central Kansas prior to the Louisiana Purchase of 1803. Charles DuTisne was a resident of Kaskaskia, a French settlement in Illinois (Zornow 1957). After traveling down the Missouri River, he crossed the plains of Kansas where he visited the Pawnee in 1719. At that time they were residing on the Lower Neosho River (Connelley 1918). Etienne Bourgmont was commissioned to visit the Padoucas to secure a treaty promoting peaceful relations between the Padoucas and the Indians of eastern Kansas. The Grand Village of the Padoucas was probably located in either Ellsworth or Saline County (Wedel 1959). Bourgmont estimated the town had 100 lodges with 800 warriors. Their allegiance was promised to the French Crown with a treaty signed in 1724 (Connelley 1918).

Although others explored the future state of Kansas, there is little recorded information concerning settlement of the Marion area

until the first quarter of the nineteenth century. In 1821 Kansas was still part of the Missouri Territory. A trail, used as a trade route between the frontier town of Westport Landing (Kansas City), Missouri, and Santa Fe in New Mexico Territory greatly expedited travel across the Plains. On March 3, 1825, President James Monroe signed a bill authorizing a formal survey of this important route. Three commissioners, Benjamin Reeves, Thomas Mather, and George C. Sibley, were appointed to head the project. Two surveyors, Joseph Brown and Archibald Gamble, were chosen for their surveying ability.

Between 1820 and 1855 the Santa Fe Trail served as one of the primary routes for travel to the western United States. Travelers discovered Kansas was not the "Great American Desert" as first described by Major Stephen H. Long in 1822 (Zornow 1957) but was, in reality, a "well-watered and fertile country handicapped only by a lack of timber and transportation" (Ibid:63).

Because of the importance of the Santa Fe Trail, treaties were signed between the United States government and Indians residing in the Marion vicinity. The first treaty was signed in 1825 with the Osage at Council Grove. The terms were negotiated by Sibley, Mather, and Reeves guaranteeing safe conduct and right-of-way passage for people traveling through Osage territory. Eight hundred dollars in goods were received by the Osage for their cooperation (Stocking 1971). Treaties were also signed in 1853 with tribes living west of Marion County--the Plains Apache, Comanche, and Kiowa. These treaties were violated and re-signed in October 1865 including the Cheyenne and Arapaho in the second version (Unrau 1964).

In 1854, when settlement by Euro-americans began, the Kansas Territory was created. The first homestead claim in Marion was filed in 1860 although the town was not officially known as Marion Centre until two years later in 1862. The migrations began a period of unrest between area Indians and newly arrived settlers. For a short while, a company of American troops was stationed in Marion Centre (Van Meter 1972).

Beginning in 1867, additional treaties were signed as the Indians to the north and east began relinquishing their lands and relocating in the Indian (Oklahoma) Territory. Although they did not live within the immediate area, it was considered part of their hunting territory. The Shawnee surrendered most of their land in 1867 and the Kansa were removed to the Indian Territory in 1873. To the east, the Sauk and Fox yielded the remainder of their lands in 1867. The Osage, who were south in present Sedgwick County, gave up their land in 1873. No Indians remained in the Marion region after 1877 (Ibid).

2. Nineteenth Century Settlement

Kansas became a United States Territory in July 1854. Marion County was formally established August 30, 1855, and the state of Kansas was admitted to the Union on January 29, 1861.

When the Indian conflicts were resolved and the Civil War ended, Euro-americans were encouraged to migrate westward. The Homestead Act of 1862 allowed government land to be purchased for \$1.25 an acre. Early newcomers arrived from the eastern states and foreign countries including Bohemia, Canada, England, Germany, and Russia.

The plat of Marion Centre was filed with the Register of Deeds office December 8, 1866 (Marion County Deed Book 1). The original site for occupation was to be on the hill east of the present downtown area. People, however, preferred the area on the east bank of the Cottonwood River. The probability of flooding did not prevent them from building homes and businesses in the low lying river location. Some homesteaders became frustrated with the flooding problem and simply abandoned their houses while other homes were moved to new locations. One of these original houses is now located north of Pilsen.

Flooding was not the major cause of emigration, however. A depression in 1893 caused a financial panic. People could not sell their crops because there was no money available to purchase them. The mineral springs resort of Chingawassa north of Marion also went bankrupt at this time.

3. Twentieth Century Settlement (Growth of Marion County)

Marion is both the oldest town in Marion County and the county seat. The population rose and peaked in the 1920's, but has since declined and leveled off at about 2200. The town contains several businesses and public services that have served the community since the late 1800's.

Main Street, shown on the original plat, has several native stone buildings dating from the 1880's that are still occupied by business firms. The Marion County Courthouse, the present Hill Grade School, and the former Elgin Hotel are buildings listed on the National Register of Historic Places. A number of residences have been inhabited since the late 1800's.

4. Marion Reservoir Survey

The United States Army Corps of Engineers planned four reservoir projects in the 1960's for dealing with flood control, water supplies, and conservation. The Marion Reservoir northwest of Marion was one

of these projects. Construction commenced in 1964 and was completed four years later. The project was directed through the Tulsa District office of the Army Corps of Engineers at a cost of \$13,600,000.

About 3500 acres of water and land are reserved for wild life management and public hunting by the Kansas Forestry, Fish and Game Commission. Both the wild life preserve and public areas provide habitat for geese, pheasants, and quail. The main aquatic species represented are walleye, white bass, and channel catfish.

Special areas around the lake shores have been set aside and maintained for public use. Cottonwood Point and Marion Cove are located along the eastern shore; Durham Cove is located on the northwest; and French Creek and Hillsboro Coves are in the southwest portion. These cove areas ahve picnicking, boat ramps, overnight camping, and restroom facilities.

III. MARION RESERVOIR SURVEY

The reservoir area was investigated between October 1979 and February 1981. Laboratory and research work was conducted between trips to the field.

Conditions

Cultivated fields of milo constitute the majority of the land area within the Marion Reservoir landholding for wildlife preserves and public hunting areas. Some leased areas contain native vegetation (pasture), wheat, and corn. The surfaces for public use (coves) are either native grasses or have been landscaped with grass and trees. Some public areas have parking lots and boat ramps that have considerably altered the natural terrain, and all public areas have picnic facilities. These areas are mowed and maintained by Corps of Engineers personnel.

Several areas adjacent to the water were too marshy to permit our usual pedestrian survey.

Three small islands, located south of the bridge, were checked for potential archaeological sites because they still stood above the conservation pool water level at 1350 feet above mean sea level when the reservoir had been filled. Ray Parrish, area manager of the Kansas Fish and Wildlife Commission, provided boat transportation to the islands. He also informed us that the islands' heights have been aggrading through sand deposition when they are inundated by the 1358 foot level flood pool. All appear to have been isolated erosional remnants along the north bank of the one-time North Cottonwood River channel. The islands are not shown on the U.S.G.S. Durham Quadrangle map, but they are depicted on U.S.C.E. map of public hunting areas for Marion Lake. The northernmost island is the only one exhibiting much undercutting from wave action.

Approach and Methods

During the investigation three primary techniques were employed--an archival and records search, landowner and informant interviews, and a ground surface inspection by the survey team.

1. Archival and Records Search

Several sources were used when searching works dealing with Kansas archaeology and history. The report's bibliography includes

the published materials dealing with the Marion vicinity.

The Wichita State University Ablah Library and the Kansas State Historical Society both contained information dealing with the history and archaeology of south central Kansas with the major emphasis on the Marion region. The State Archaeologist's office was consulted for files containing data on recorded and unpublished materials concerning the project area. The National Register of Historic Places and the Register of Historic Kansas Places were examined for designated historic sites or buildings. The Marion County Soil Agent and the Register of Deeds' office provided information concerning the environment and possible resources.

2. Informant Interviewing

Interviews were conducted with persons living within and near the survey region. John Nickel, Leland Kaiser, and Mrs. Oliver Unruh reported no knowledge of archaeological materials gathered from within the area of study. Personnel at the Corps of Engineers' project office have items collected from southeast of the area concerned. Several known sites located northwest of Durham have been recorded by the Kansas State Historical Society. Cultural materials from these sites occur in the private collections of area residents. Although our informants indicated knowledge of these archaeological sites outside the reservoir boundaries, they had neither observed nor heard of sites within the U. S. Army Corps of Engineers' lands at Marion Reservoir.

3. Fieldwork

The area within the reservoir boundary was subjected to a thorough pedestrian survey. Places where potential archaeological sites were most likely to be located--on terraces and low ridges--were very closely examined by the survey team. The remaining land surfaces, such as creek banks, hilltops, fields, and pastures, were subjected to walking inspection by on-foot surveyors. The survey team traversed the grounds in zigzag or straight line patterns as appropriate for the topography.

Shovel tests were dug in several areas to determine the possibility of subsurface cultural materials where ground surface visibility was seriously impaired (Fig. 2). This procedure uncovered archaeological remains at Sites 14MN536 and 14MN537. One area along the reservoir shoreline was virtually inaccessible because of extremely marshy and saturated ground. This was in Section 25 north of the bridge in the northern portion of the reservoir.

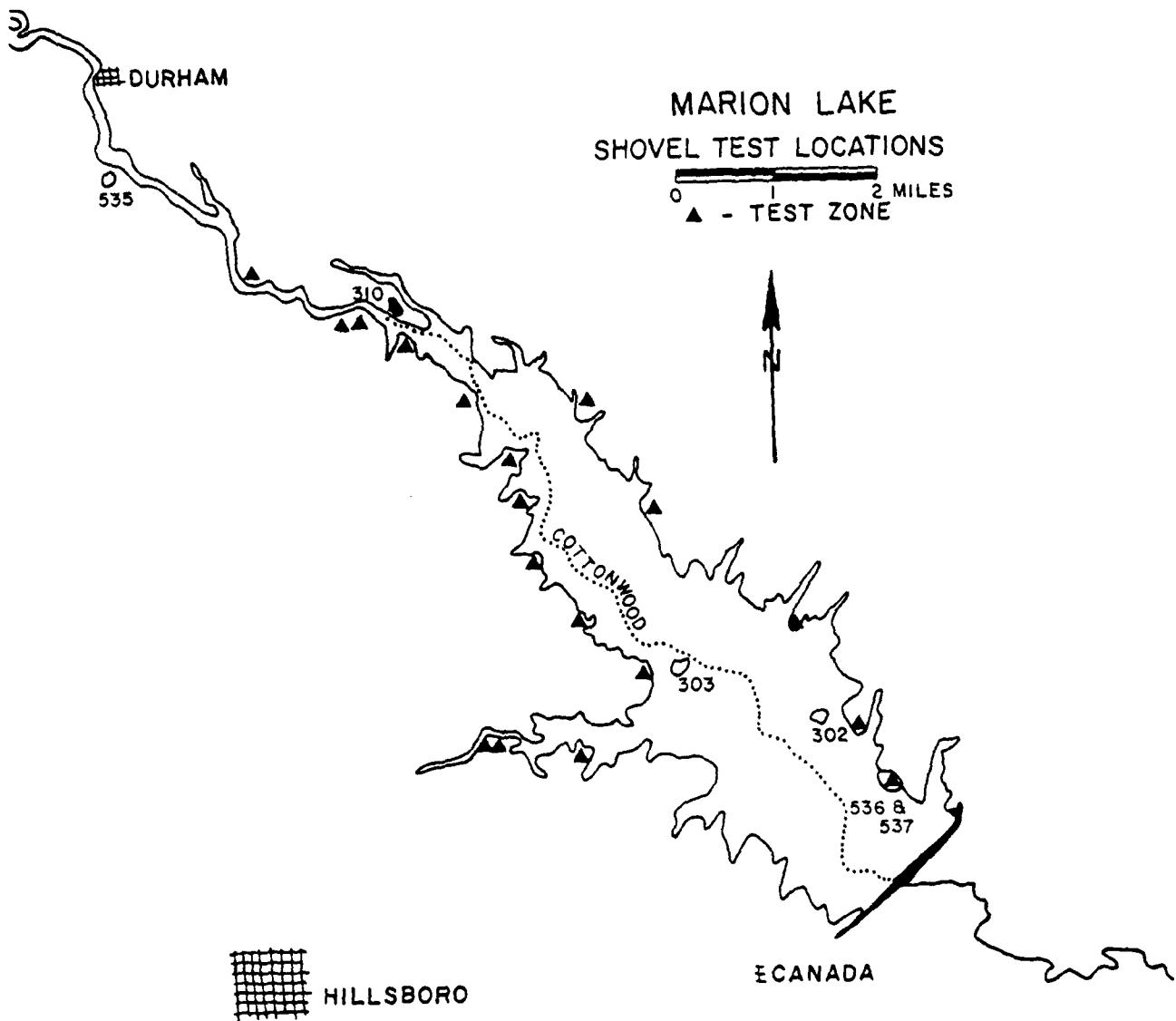


FIGURE 2. MAP OF SHOVEL TEST LOCATIONS

TABULATION OF CREW WORK TIME:

<u>Date of Survey</u>	<u>Crew Size</u>	<u>Hours in Field</u>	<u>Person hours in Field</u>
October 9, 1979	1	9	9
October 13, 1979	2	8	16
October 18, 1979	1	9	9
November 8, 1979	1	9	9
November 12, 1979	1	9	9
December 5, 1979	1	9	9
December 10, 1979	1	9	9
January 15, 1980	1	8	8
January 21, 1980	1	8	8
February 12, 1980	1	8	8
February 20, 1980	1	8	8
February 27, 1980	2	8	16
March 3, 1980	1	9	9
March 6, 1980	1	9	9
March 11, 1980	3	8	24
February 27, 1981	4	4	16
February 28, 1981	4	8	<u>32</u>
Totals - 16.5 days		140	208

IV. CULTURAL RESOURCES IDENTIFIED

Archaeological Sites - within the project area

14MN535

Description

Site is located on a low knoll in a milo field west of the North Cottonwood River and on the south bank of an unnamed tributary. Erosion has caused some material to wash from the slopes of the knoll. Size is ca. 50 meters (E-W) x 65 meters (N-S) (Fig. 3).

Surface Collection

Chert flakes, one retouched flake, one potsherd, hematite, burned limestone, and a quartzite chunk were recovered during the 1980 survey.

Testing

Six shovel tests were dug to 30 cm. below ground surface, but no additional cultural materials were observed.

Interpretations

The absence of diagnostic artifacts does not permit any conclusions regarding the age or cultural affiliation of the site. Its small size and the paucity of observed materials would argue for the former presence of a relatively temporary camp for a relatively small group of people. The burned limestone chunks indicate the former existence of fires for cooking, warming, or both.

Condition

Farming activities and erosion have damaged the site to an unknown extent. Soil atop the knoll consists mostly of sand mixed with loam.

Project Impact

While the site lies within the Marion Reservoir boundary, it is situated well above the river channel and should not be subject to flooding during high water. Continued farming and erosion will further damage what is left of the site.



FIGURE 3. PHOTO OF SITE 14MN535

Recommendations

This site shows no evidence of importance because of age, rarity, size, richness of material, good preservation, or information potential. Consequently, it would not appear to meet the criteria for eligibility for inclusion on the National Register of Historic Places nor on the Register of Historic Kansas Places. Since no direct impact is projected, the site should be preserved.

14MN536

Description

This site is situated on a low ridge west of Marion Cove just at the level of the conservation pool which surrounds it on the northwest, south, and southeast. Cultural materials are most visible along the sandy beaches formed by wave action adjacent to the eroding cultural deposit. The site presently measures about 100 meters (N-S) x 80 meters (E-W), although it must have been larger at one time.

Surface Collection

One pottery sherd, one knife fragment, two retouched flakes, one utilized flake, a quartzite pebble, and 50 chert flakes (Fig. 4).

Testing

At the time of survey in March 1980, ten shovel tests were dug along the southeast beach to depths of 30-60 cm. below ground surface. The topmost 10 cm. consisted of fine sand, but below 10 cm. was light-colored clay. Below 30 cm. depth, the tests immediately filled with water. No additional materials were recovered from these shovel tests.

In February 1981, two pits, each 2 meters square, were excavated in the uneroded soil deposit (Fig. 5). Test A lay between the wave-cut bank and the high water debris line. It was excavated to a depth of 32 cm. encountering a plow zone base at 17 cm. and some scattered baked earth flecks at 10 cm. Test B lay above the high water debris on the low ridge crest. It was excavated to a depth of 35 cm. and encountered a plow zone base at 17 cm. and an iron nail with charcoal at 10 cm. No flakes of chert or other prehistoric materials were recovered. A one-meter square, designated Test C, in a sloping erosion zone was trowel scraped to the base of soil zone producing 1 chert flake and several baked earth lumps. Finally a profile was shaved along the wave cut bank of the site's southeast side. The plow zone base showed at 13-15 cm. below the ground surface, but a brown clayey loam extended down to 23-30 cm. Two chert

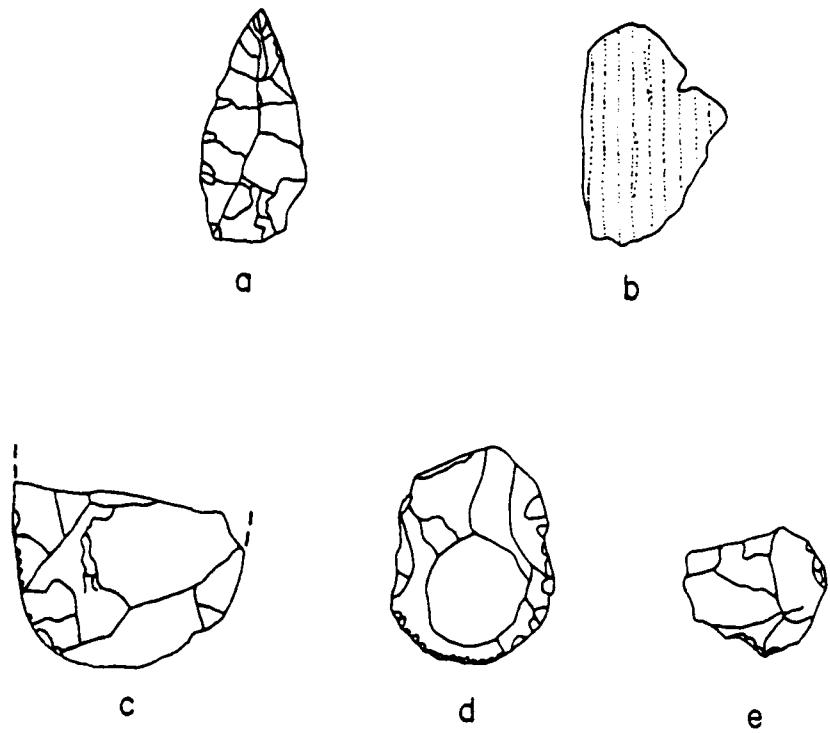


FIGURE 4. ARTIFACTS* FROM SITES 14MN536 AND 14MN537

- A. POINT - 14MN537
- B. POTSHERD - 14MN536
- C. KNIFE FRAGMENT 14MN536
- D. SCRAPER - 14MN537
- E. RETOUCHEO FLAKE - 14MN536

*ACTUAL SIZE

SITE 14MN536
TEST EXCAVATIONS

A-TEST SQUARE

▲-SHOVEL TEST

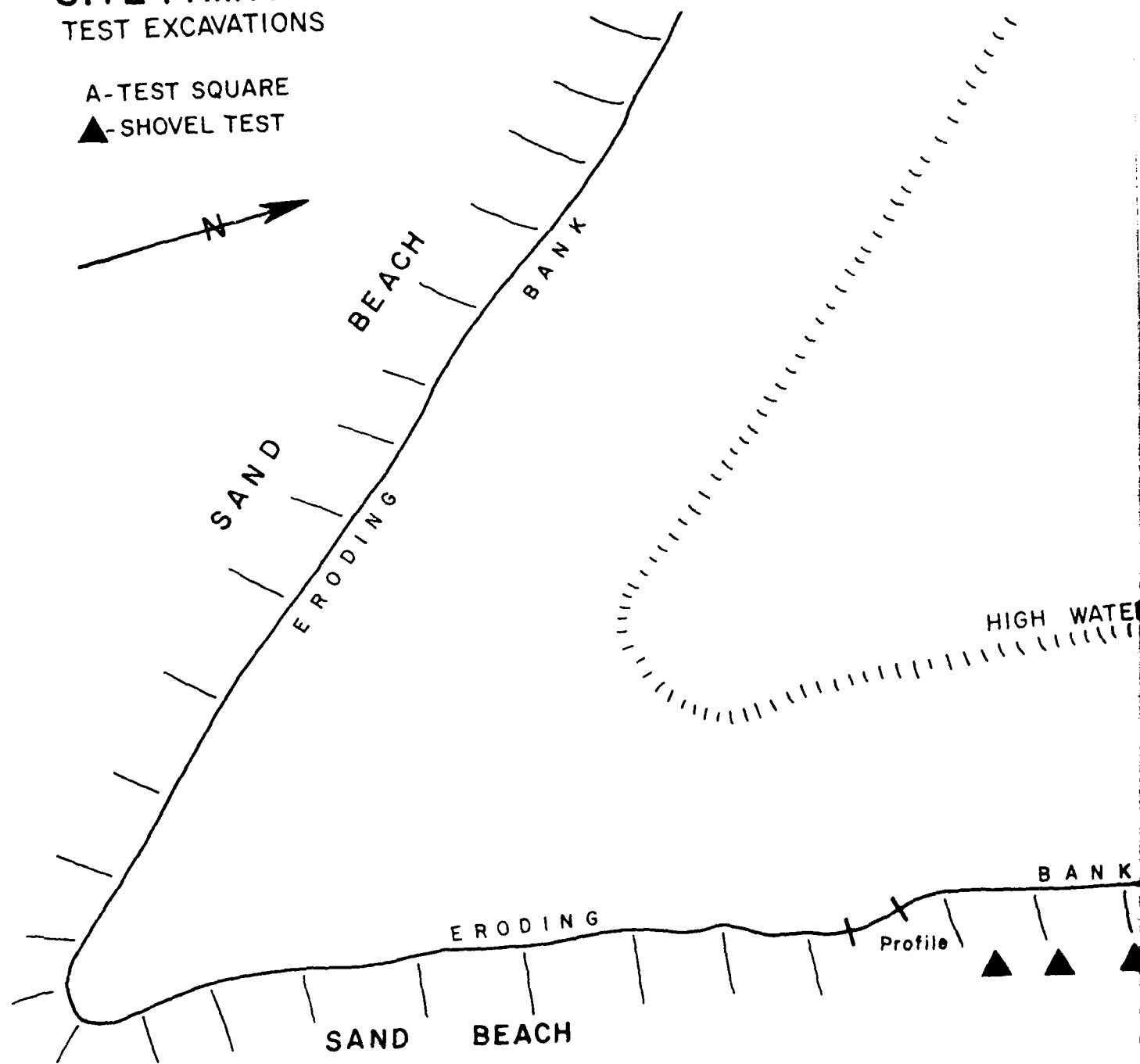
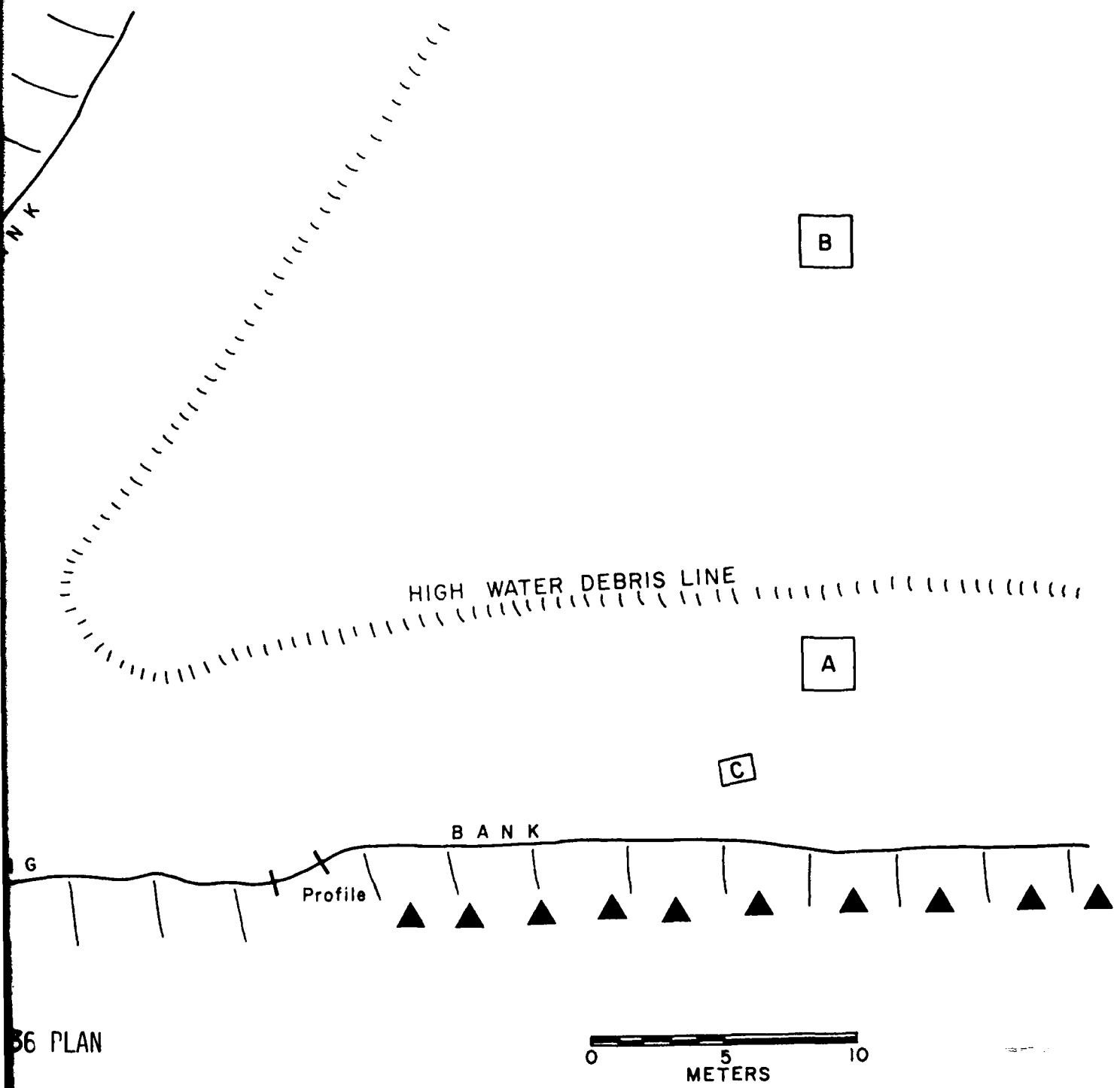


FIGURE 5. SITE 14MN536 PLAN



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flakes appeared in this stratum. At the base of the profile was the same light-colored reddish-brown clay that had been encountered below the beach sand in the shovel tests. This profile extended to 44 cm. below ground surface.

Interpretation

This site's deposits obviously lie exactly at the level of the normal conservation pool where wave action is steadily eroding the cultural deposit and distributing the cultural materials along the beach. Obviously, two occupational components are represented by the materials. Historic Euro-American farming activities and possibly clearing account for the metal nail, the charcoal, and possibly the baked earth. The chert flakes, tools, potsherd, and possibly the baked earth are prehistoric. While no artifacts are diagnostic, the assemblage would most closely resemble a Plains Village group. The probable cord-marked potsherd suggests a Central Plains affiliation. However, the paucity of recovered material, especially from the tests, further suggests a small campsite used to exploit local resources.

Condition

The site lies in the edge of the conservation pool. Wave action has eroded the deposit on three sides and will continue at all water levels above the conservation pool. The site has been farmed, but has reverted to natural grasses and shrubs. Saplings have recently been planted on the ridge northeast of the site.

Project Impact

The site is suffering constant damage from water action at the shoreline, especially as the water level fluctuates.

Recommendations

The test excavations conducted in February, 1981 failed to produce any significant data other than to confirm the location of the site. Consequently, these tests could have effectively salvaged all the useful information from the site should it be destroyed. No further work is recommended. It does not possess sufficient evidence to meet the criteria for eligibility for inclusion on the National Register of Historic Places nor the Register of Historic Kansas Places.

14MN537

Description

A cluster of cultural debris collected in a sand bar about 100 meters east of Site 14MN536 where the materials probably originated. A separate site number is retained to designate these specifically redeposited materials that have been transported by water away from the site deposit.

Surface Collection

One small undefined shouldered projectile point, one small end scraper, one quartz flake, and 70 chert flakes (Fig. 4).

Testing

At the time of survey in March 1980, eight shovel tests were dug along the sand bar and in the tree line immediately behind it. Their depths ranged from 30 to 60 cm., but water filled those below 30 cm. The top 20 cm. consisted of sand laying on top of a light-colored reddish-brown clay. One chert flake was recovered from the sand bar.

In February 1981, a 1 x 2 meter test was excavated near the west end of the sand bar. When the light-colored clay was encountered beneath about 20 cm. of sand, the test was abandoned. No cultural debris was encountered.

Interpretation

All of these materials have been redeposited in the sand bar by shoreline currents and waves. Consequently, this is not really a site. The direction of shoreline waves and the geographic situation suggest all the materials were eroded from Site 14MN536, nearly adjacent to the southwest. The materials are consistent with those recovered from 14MN536 and further hint at a Plains Village cultural affiliation.

Condition

This is a sand bar, not an archaeological site.

Project Impact

None.

Recommendation

The test excavation of February 1981 showed this not to be a site. No further work is recommended.

Archaeological Sites - recorded by the Kansas State Historical Society in 1962.

14MN302

Description

Surface scatter of chert flakes and one sandstone mano fragment located on a low sandy knoll on the east bank of the North Cottonwood River about one-half mile from the North Cottonwood River channel. Site covers approximately one acre.

Surface Collection

One medium-sized stemmed point, the medial section of a blade, worked flakes, chert flakes from local sources, and one sandstone mano fragment.

Testing

Four two-foot square test pits were dug by the Kansas State Historical Society (Witty 1963). Tiny chert flakes were recovered from two tests, one of which also contained a small red ochre chunk. The fourth test pit had some burned earth with ash and clinkers.

Interpretations

A late Archaic or Woodland time frame is suggested by the corner-notched point fragment. However, the indistinct nature of the surface collection does not provide a positive cultural affiliation.

Condition

Northern portion of site was under cultivation in corn. Remainder had oil storage tanks and drainage pits. It is presently under water.

Project Impact

Located within the conservation pool for Marion Reservoir and presently inundated.

Recommendations

No further work is possible at the present time because the site has been inundated by the reservoir waters.

14MN303

Description

Thin surface scatter of chert flakes in a cultivated field located on a low sandy terrace line to the west of confluence of French Creek and Cottonwood River.

Surface Collection

A few light gray chert flakes, one small chipped core, and the medial tip portion of a large point.

Testing

No testing was done.

Interpretation

The minute amount of surface material does not allow a cultural affiliation to be designated.

Condition

Under cultivation at time of survey. Presently under water.

Project Impact

Located within the conservation pool of Marion Reservoir and presently inundated.

Recommendations

No further work is possible.

14MN310

Description

Located on a long ridge parallel to the North Cottonwood River along the north side of the river. Area covers about 50 acres.

Surface Collection

Site was not surface collected by the Kansas State Historical Society. A collector from Marion had several projectile points and knife blades reputedly from this site.

Interpretation

An Archaic or Plains Woodland occupation is suggested from the lithic material. Cultural identification was made from a local informant's surface collection of projectile points and blades. The site is not considered to meet the eligibility criteria for inclusion on the National Register of Historic Places.

Conditions

Formerly planted in milo and corn. Currently buried beneath recent alluvium deposited by seasonal flooding of Marion Reservoir.

Project Impact

Located between the limits of the conservation pool and flood pool of Marion Reservoir and thus subject to seasonal flooding and possible erosion.

Recommendation

This site should be periodically revisited until its location can be verified and some limited testing accomplished to provide appropriate information about it. Testing is not recommended until the site's location is verified because of the unknown depth of overburden. When further information is available, mitigation may be considered to alleviate possible further damage from wave action and erosion stemming from the annual flooding. However, these suggestions might be too expensive to be cost effective. Hence, probably no action should be taken unless major changes in hydrology take place to reexpose this site.

V. SUMMARY AND RECOMMENDATIONS

Intensive pedestrian survey to define cultural resources on the U. S. Army Corps of Engineers lands surrounding Marion Reservoir encountered only two new archaeological sites. The three previously recorded archaeological sites bring the combined total of the cultural resources within the federally managed property to five. There are no historic sites or architecturally significant structures.

None of the three sites previously recorded by the Kansas State Historical Society could be revisited. Sites 14MN302 and 14MN303 are presently beneath the waters of Marion Reservoir (Table 1). Site 14MN310 near the upper end of the conservation pool has been totally obliterated by alluvium deposited during floodstage since construction of the reservoir. Existing records for these three sites were thoroughly examined in the archives of the Kansas State Historical Society and relevant information about them has been included in this report.

Evidence for Site 14MN536 occurred within the wave action zone and at 14MN537, indicating the site is currently being damaged. The other site, 14MN535, lies in a plowed field near the upper limit of the maximum flood pool. Existing knowledge suggests that all the sites are relatively small and represent relatively short occupation spans. No historic sites or buildings were identified.

Following the terms of the contract, all federally owned and managed lands around Marion Reservoir were subjected to intensive archaeological survey. Even the larger islands near the northern end of the lake were visited by boat. Only one plot of about 20 acres along the shore in Section 25, R.2E, T.18S. could not be traversed on foot because of soft mud. Consequently on the map of the project area, the property boundary also delineates the surveyed area.

Despite the nearness of the large Great Bend settlements at Marion, none of the five archaeological sites identified within the Marion Reservoir project area seems to equal them in scope. In fact, all five lack any of the criteria of size, richness, age, rarity, or information potential to meet the eligibility criteria for inclusion on the National Register of Historic Places. Some of them could represent marginal work areas or outlying camps associated with the Marion Great Bend sites, but at least two of them may be somewhat older.

In general, the stretch of the North Cottonwood River presently covered by Marion Reservoir, and roughly from Durham to the confluence with the South Cottonwood River, appears to be relatively devoid of archaeological remains. This helps to define a boundary around the extensive Great Bend settlements at Marion partially encompassed by the Marion Archaeological District. A small survey at Marion County Lake (Rohn and Malone 1980) defines a similar boundary to the southeast, thus bracketing the Marion Great Bend occupation along the Cottonwood River valley.

Although this extensive proto-historic Great Bend use of the Marion locality has tended to obscure earlier archaeological sites, there is solid evidence for both Plains Woodland and Archaic peoples living here too. In both cases, however, the pattern of primary settlement at Marion--the junction of Mud and Clear Creeks with the Cottonwood River--and the absence or light use of adjacent areas such as at Marion County Lake and Marion Reservoir appears to persist. Consequently, we may suspect that the particular environment of the Marion locality held a recognizable attraction for settlement by prehistoric peoples from Archaic times to the beginnings of Euro-American colonization.

Recommendations for the archaeological sites in Marion Reservoir are summarized in Table 1. Because Sites 14MN302 and 14MN303 are so far under water, no action can be readily taken to learn more about them. Site 14MN536 and its associated drift at 14MN537 have already been tested and appear to warrant no further investigation.

Site 14MN535 seems to be free of any direct impact from the lake and it can be preserved. Site 14MN310 presents some problems. Our primary knowledge of it originates from local collectors and it presently appears to be buried beneath fresh alluvium. It would be desirable to accurately locate and test this site, particularly because it is subject to periodic flooding and possible damage. Yet, a testing program might require power machinery to remove an unknown depth of overburden. Theoretically the alluvial mantle should protect the site, but it also effectively removes it from probable investigation should that action become desirable at some future date.

TABLE 1

SUMMARY OF RECOMMENDATIONS

<u>Site</u>	<u>Condition</u>	<u>Age</u>	<u>Significance</u>	<u>Recommendation</u>
14MN302	Underwater	late Archaic(?)	minor	None
14MN303	Underwater	?	?	None
14MN310	Under sediment	Central Plains Plains Woodland	Possible Kansas Inventory	None
14MN535	Eroding knoll	?	minor	None
14MN536	Near shoreline	Plains Village	minor	None
14MN537	Not a site			None

BIBLIOGRAPHY

Bell, Robert E.

1958 Guide to the Identification of Certain American Indian Projectile Points. Special Bulletin No. 1 of the Oklahoma Anthropological Society. Oklahoma City.

1960 Guide to the Identification of Certain American Indian Projectile Points. Special Bulletin No. 2 of the Oklahoma Anthropological Society. Oklahoma City.

Calabrese, F. A.

1967 The Archeology of the Upper Verdigris Watershed. Kansas State Historical Society Anthropological Series No. 3. Topeka.

Connolley, William E.

1918 A Standard History of Kansas and Kansans. Vol. I. Lewis Publishing Co. Chicago.

Glover, Gerold F.

1978 Analyses of Early Paleo-Indian Points. Masters Thesis. Wichita State University.

Grosser, R. D.

1973 A Tentative Cultural Sequence for the Snyder Site, Kansas. Plains Anthropologist 18 (61):228-38.

Howard, James H.

1964 Archeological Investigation in the Toronto Reservoir Area, Kansas. River Basin Survey Paper No. 38, Bureau of American Ethnology Bulletin 189. Washington.

Leaf, Gary R.

1979 Finding, Managing, and Studying Prehistoric Cultural Resources at El Dorado Lake, Kansas (Phase I). Report to Dept. of the Army Corps of Engineers, Tulsa District. University of Kansas, Museum of Anthropology Research Series, No. 2. Lawrence.

Marion County, Register of Deeds
Deed Books.

Marshall, James O.

1972 The Archeology of the Elk City Reservoir: A Local Archeological Sequence in Southeast Kansas. Kansas State Historical Society Anthropological Series No. 6. Topeka.

Monger, Earl

1970 A Preliminary Report of the Larned Site. Kansas Anthropological Association Newsletter, Vol. 15, No. 8:1-15.

National Register of Historic Places

1976 Supplement. U. S. Department of the Interior, National Park Service. Washington.

Perino, Gregory

1968 Guide to the Identification of Certain American Indian Projectile Points. Special Bulletin No. 3, Oklahoma Anthropological Society. Oklahoma City.

Register of Historic Kansas Places

1975 Historic Preservation Dept., Kansas State Historical Society, Vol. 2: as compiled to July 1, 1973. Topeka.

1976 Historic Preservation Dept., Kansas State Historical Society, Vol. 2. Supplement 1975.

1977 Historic Preservation Dept., Kansas State Historical Society, Vol. 2. Supplement 1976.

Reichart, Milton

1972 A Plainview Type Point from the Delaware. Kansas Anthropological Association Newsletter 18:8-9.

1974 A Meserve Point from Northeast Kansas. Kansas Anthropological Association Newsletter. 19:1-3.

Reid, Kenneth C.

1979 Fiber Tempered Pottery from Nebo Hill. Paper presented at 37th Plains Conference. Kansas City.

Reynolds, John

1979 The Grasshopper Falls Phase of the Plains Woodland. Kansas State Historical Society, Anthropological Series No. 7.

Rohn, Arthur H. and Katherine Daniel

1979 Rocky Ford Archaeology, Hillsdale Lake, Kansas. Report to the National Park Service, Denver.

Rohn, Arthur H. and Judith A. Malone

1980 Cultural Resources Reconnaissance Survey, Marion County Lake Improvement District, Marion County, Kansas. Report to the Environmental Protection Agency.

Rohn, Arthur H., C. M. Stein, and Gerold Glover

1977 Wolf Creek Archaeology, Coffey County, Kansas. Report to the Kansas Gas & Electric Company, Wichita.

Rowlison, Don
1977 A Report of the Archaeological Investigations at the Big Hill Lake Project, Southeastern Kansas. Report to U. S. Army Corps of Engineers, Tulsa District. Archaeology Dept., Kansas State Historical Society. Topeka.

Schmits, L. J.
1976 The Coffey Site: Environment and Cultural Adaptation at a Prairie Plains Archaic Site. Report to National Park Service, Denver.

Schoewe, Walter H.
1949 The Geography of Kansas, Part II - Physical Geography. Transactions of the Kansas Academy of Science. Vol. 52, No. 3.

Shippee, J. M.
1948 Nebo Hill, a Lithic Complex in Western Missouri. American Antiquity, Vol. 14, No. 1, pp. 29-32
1964 Archaeological Remains in the Area of Kansas City: Paleo-Indians and the Archaic Period. Missouri Archaeological Society Research Series, No. 2. Columbia.

Solecki, Ralph
1953 Appraisal of the Archaeological and Paleontological Resources of the Tuttle Creek Reservoir, Marshall, Pottawatomie and Riley Counties, Kansas. Missouri Basin Project, Lincoln.

Stocking, Hobart E.
1971 The Road to Santa Fe. Hastings House. New York.

Unrau, William E.
1964 Indian Agent vs. the Army: Some Notes on the Kiowa-Comanche Treaty of 1865. The Kansas Historical Quarterly. Vol. 30, No. 30.

Van Meter, Sondra
1972 Marion County Kansas, Past and Present. M. B. Publishing House. Hillsboro, Kansas.

Wedel, Waldo R.
1959 An Introduction to Kansas Archeology. Bureau of American Ethnology, Bulletin 174. Washington.
1961 Prehistoric Man on the Great Plains. University of Oklahoma Press. Norman.

Wilmeth, Roscoe
1970 Excavations in the Pomona Reservoir. Kansas State Historical Society, Anthropological Series No. 5. Topeka.

Witty, Thomas A., Jr.

1963 Appraisal of the Archaeological Resources of the Marion Reservoir, Marion County, Kansas. Kansas State Historical Society. Topeka.

1964 1964 Fieldwork in the Council Grove Reservoir. Kansas Anthropological Association Newsletter, Vol. 10, No. 4. Dec.

1967 The Pomona Focus. Kansas Anthropological Association Newsletter, Vol. 12, No. 9, pp. 1-5. Topeka.

1980 Salvage Archaeology of the John Redmond Lake, Kansas. Kansas State Historical Society, Anthropological Series No. 8. Topeka.

Wood, Caryl E.

1977 Report of Archaeological Test Excavations at the Proposed Cedar Point Lake, Kansas. Kansas State Historical Society. Topeka.

Zornow, William F.

1957 Kansas: A History of the Jayhawk State. University of Oklahoma Press. Norman.

PERSONS INTERVIEWED

Gantz, A. L., Marion County Soil Agent

Kaiser, Leland, Marion County, Kansas

Nickel, John, Marion County, Kansas

Parrish, Ray, Area Manager for the Federal Fish and Wildlife Commission

Unruh, Mrs. Oliver, Marion County, Kansas

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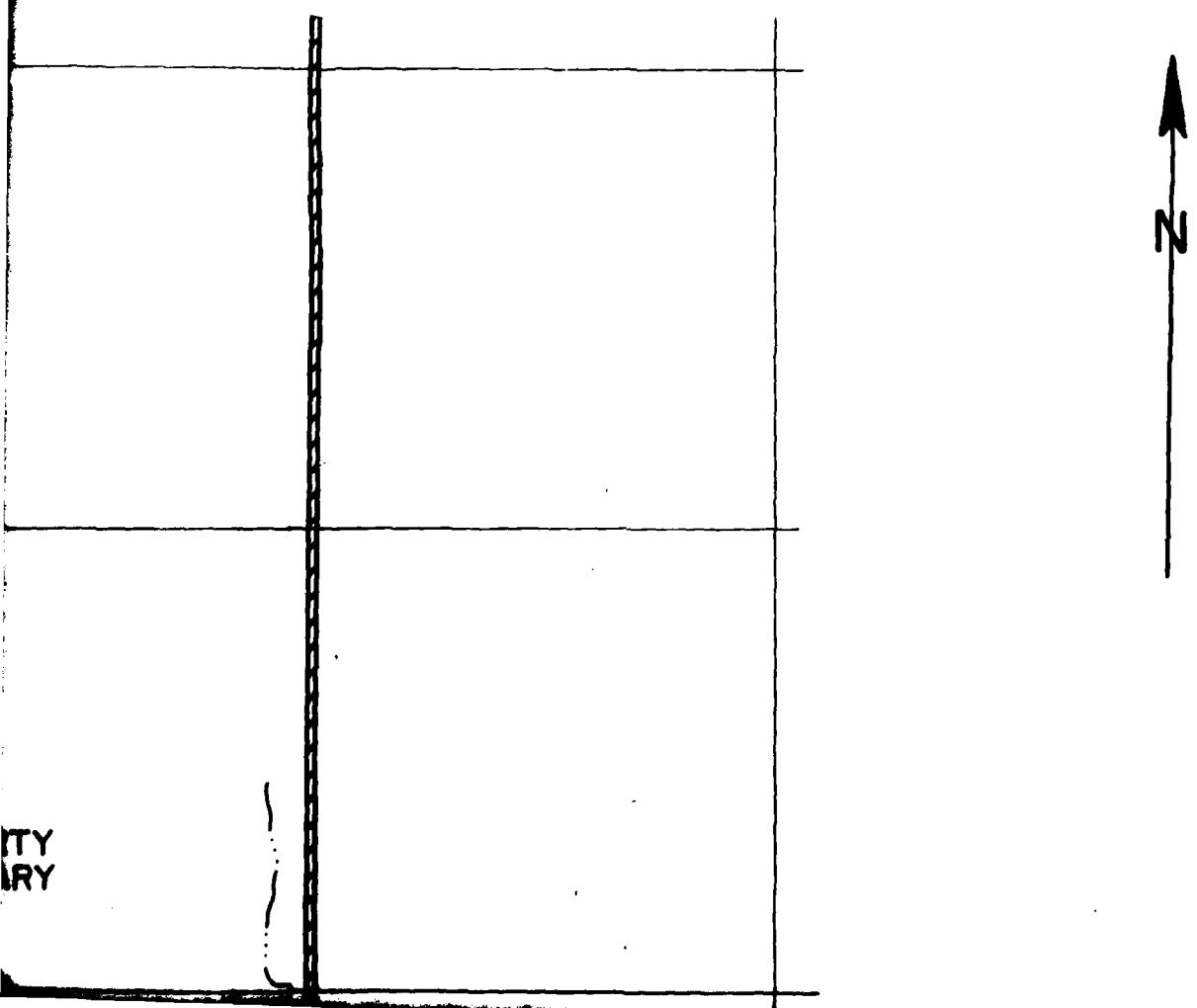
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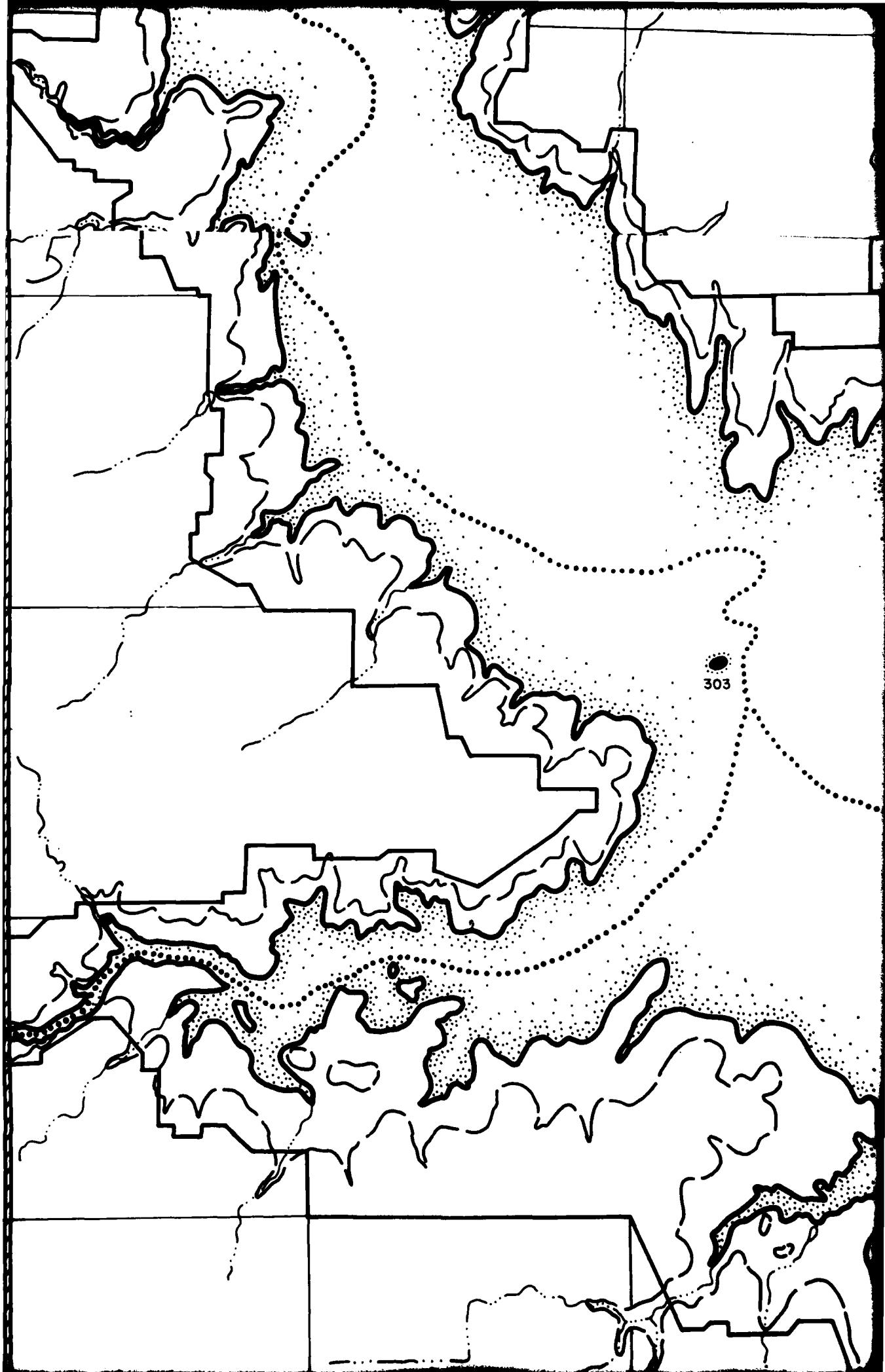
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